

ABSTRACT OF THE DISCLOSURE

In an automatic transmission having a clutch and a gear type transmission, when it is determined that a driver has an intention to stop a vehicle, the clutch is disengaged and the gear type transmission is changed to its neutral position. Thereafter, the clutch is held in its disengaged state, and when an accelerator opening amount is greater than or equal to a predetermined value, the gear type transmission is changed to gear according to a vehicle speed to engage the clutch.

Under a condition such that a drive has an intention to decelerate the vehicle, when it is determined that an engine is in an idle-up state and when it is detected that the vehicle speed is less than a predetermined value, changing of the gear type transmission to its neutral position occurs. Whether or not the engine is in the idle-up state is determined by the amount of fuel injection.

In a multi-stage transmission in which a range type sub transmission is connected to a main transmission and, changing of the sub transmission takes place while the main transmission is held in its neutral position, during a vehicle stopping if changing operation of the sub transmission is not completed within a predetermined time lapse, a determination is made that a batting state occurs in the sub transmission to start the changing of gear by the main transmission.